AEROSUD CLIMBS THE SMARTNESS SCALE

by Leon Liebenberg

From manufacturing aircraft components, Aerosud is moving towards the design and development of its own products, as well as encouraging engineering students to participate.

→ *Doctor Paul Potgieter*

The globalised world of today is driven by forces that are emphatically affecting all entities, whether they are nations, communities, companies or research organisations. It is my goal for Aerosud to compete globally in a sustainable fashion, while maintaining its local relevance. To not transform today is to be left behind.

To ensure sustainability, it is important for any global company to climb the "smartness scale" as high as possible. One should make oneself absolutely indispensable in the business world.

At the lowest level of the smartness scale, where low risk is implied, components are manufactured under licence ("industrial participation"). Aerosud has manufactured some 50,000 components over the past two years alone for Airbus, Boeing and Westland. Aerosud is also the exclusive supplier of wing leading-edge components for the A320 family of aircraft, the deal being worth some $100 million (R650 million). The low risk is implicit due to other competitors being able to do the same work, implying that cost is the deciding factor when selecting an industrial partner.

The next level on the smartness scale involves risk-sharing partnerships, where the company is an embedded partner in the programme and cannot be displaced. In this respect, Aerosud invests large capital in partnership with the national government and local industry, to supply aircraft systems for the Airbus A400M, the new generation heavy-lift transporter plane. This type of initiative places Aerosud under extreme pressure to perform to the required quality, cost and timing. And if there's one aspect that is not tolerated in the global aerospace industry, it's late delivery.

At the highest level of the smartness scale is the design and development of own products (such as jet-engine infrared signal suppressors), with the associated high risks. Aerosud is only 15 years old, and will soon expand its activities in this highest level of smartness to ensure maximum intellectual capital, and consequential sustainability of our technological efforts. To aid this process of climbing the smartness scale, Aerosud is currently undergoing a R100-million expansion project that will include the procurement of several high-speed, three- and five-axis, computer numerically controlled machines for the machining of airframe structural monolithic parts that are machined out of a single piece of aviation-grade aluminium.

Aerosud is experiencing exciting times, with more than $500 million (R3.3 billion) on its order books to supply customers such as Airbus, Boeing, BAE Systems, and Agusta-Westland, the large helicopter manufacturer. This kind of turnover obviously requires an effective management team as well as dedicated and motivated staff. My management style is based on a sense of ownership, where I expect my directors to base their decisions on their consequential sharing of the profit or loss. But I also believe in giving my team the freedom to act, or else it becomes a case of telling someone to swim but not to get wet.

Leon Liebenberg

Social investment has always been high on the company's agenda. We started a very successful aviation academy a few years ago at a local high school, where learners get the opportunity to obtain their private pilot's licences at no cost. Our staff also lecture additional mathematics and science to Grade eight and nine learners; in addition we lecture at the University of Pretoria's Space and Aviation Camp for Grade 11 and 12 school learners. Aerosud is very much aware of the chasm that exists between industry and tertiary education. I think that engineering graduates simply take too long before they become useful in industry. To help overcome this gap, Aerosud will soon launch an innovation centre where engineering students will get the opportunity to do sponsored internships at Aerosud. The students will work on real industrial problems under the guidance of highly skilled and experienced engineers.

Change is happening faster than ever before, but Aerosud is perfectly positioned to take on the global challenge.

- South Africa is buying eight Airbus A400M new-generation air transporters, for a reported R6.4bn to R8bn. South African contractors have received guaranteed design-and-build contracts worth about R3.2bn, and expect further orders worth another R3bn in the first 15 years of production.

- State-owned Denel Aviation and privately owned Aerosud are the prime South African suppliers to the A400M of such components as wing tips, wing-to-fuselage fairings and thermoplastic linings for the nose fuselage and cargo hold.

- The A400M deal dovetails neatly with the SA Department of Trade and Industry's efforts to promote aerospace, along with other high-value, advanced manufacturing sectors such as vehicles, diamond cutting, information and communication technology, pharmaceuticals and biotechnology.

- Significant South African aerospace companies are negotiating with Airbus for partnerships in the design and manufacture of important subsystems in the future A350 airliner.

Aerosud is the largest private-sector aviation-industrial company in South Africa. Before founding the company in 1990, Doctor Potgieter was programme manager for the Alpha XH1 helicopter at the National Institute for Defence Research (Council for Scientific and Industrial Research); programme manager for development of the Rooivalk attack helicopter; and later assistant general manager (Helicopter Division) at Denel Aviation. Doctor Potgieter holds a commercial pilot's licence with instrument rating, as well as a multi-engine rating. In his spare time he participates in competitive road cycling. Doctor Potgieter is married and has three children.

→ *Airbus A400M, Global Transporter*